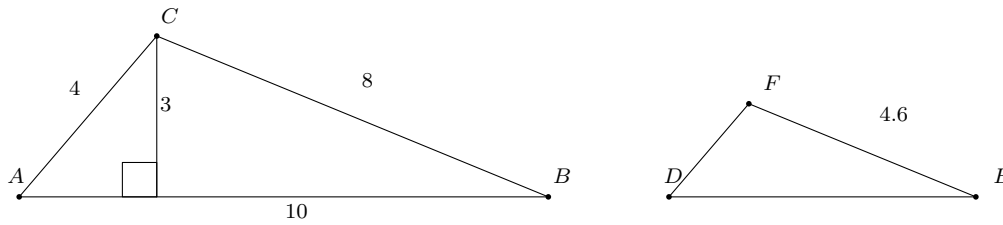


1. The triangles in the following figure are similar. Find the perimeter and area of $\triangle DEF$.



2. A 7-ft upright pole near a vertical tree casts a 6-ft shadow. Find:

- (a) the height of the tree if its shadow is 36-ft long.
- (b) the length of the shadow of the tree if its height is 77-ft.

3. To measure the distance across a river a group of scouts formed the triangles shown in the following figure. Will their method work? If so, what is the width of the river?

